

AMENDMENTS TO THE CLAIMS

Please amend claims 3, 4, 17 and 19, and add new claims 24 and 25 as follows:

1 (Previously Amended) A portable computer system comprising:

2 an indicating device having a plurality of light emitting devices activated according to a
3 signal from the portable computer system; and

4 a controller managing said indicating device to display power-on self-test (POST) codes in
5 response to operating states of the portable computer system, the power-on self-test codes being
6 generated in power-on self-test process by a basic input-output system (BIOS) of the computer
7 system.

1 2. (Original) The portable computer system of claim 1, further comprising a key input device
2 coupled to said controller, said key input activating a display of power-on self-test codes on the
3 indicating device in response to a key input signal from the key input device.

1 3. (Currently Amended) The portable computer system of claim 2, with the key input device
2 being a keyboard of the portable computer system, and with each power-on self-test code
3 corresponding to a specific light emitting device.

1 4. (Currently Amended) A portable computer system comprising:

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an indicating device having a plurality of light emitting devices activated according to a
signal from the portable computer system; and

a controller managing said indicating device to display power-on self-test (POST) codes in
response to operating states of the portable computer system, the power-on self-test codes being
generated in power-on self-test process by a basic input-output system (BIOS) of the computer
system.

~~The portable computer system of claim 1, with the operating states comprising of a power
on or off state, number lock state, a capital letter state, a scroll lock state, an access state of a disk
drive, and a charge state of the battery.~~

5. (Original) The portable computer system of claim 4, with said indicating device being a
plurality of light emitting diodes, with each power-on self-test code corresponding to a specific light
emitting diode on the portable computer.

6. (Original) The portable computer system of claim 5, with said light emitting diodes
sequentially aligned along a surface of the portable computer according to an order of operating
states being tested by the portable computer, the alignment accommodating a rapid view of a
progress of the power-on self-test.

7. (Original) The portable computer system of claim 6, with the light emitting diodes
indicating where an error has occurred in the portable computer system.

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1 8. (Original) The portable computer of claim 1, said controller connected to a data bus
2 located internally in the portable computer.

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1 9. (Original) A portable computer system, comprising:
2 an address decoder coupled to an address bus generating a latch control signal by decoding
3 an address of an output port accommodating power-on self-test codes;
4 a latch coupled to a data bus of the portable computer system latching the power-on self-test
5 codes from the data bus in response to the latch control signal;
6 an indicating device having a plurality of lighting devices indicating operating states of the
7 portable computer system,
8 a controller generating an indicating control signal in response to the operating state; and
9 a selector sending either the indicating control signal or power-on self-test codes of the latch
10 to said indicating device.

1 10. (Original) The portable computer system of claim 9, with the latched power-on self-test
2 codes being outputted to the indicating device when the address decoder translates the address of the
3 output port for power-on self-test codes.

1 11. (Original) The portable computer system of claim 9, with the controller managing the
2 selector to output the power-on self-test codes latched in the latch during the power-on self-test

process.

1 12. (Original) The portable computer system of claim 11, further comprising a key input
2 device coupled to the controller, said controller regulating the selector to output the power-on self-
3 test codes held temporarily until a key input signal response from the key input device during the
4 power-on self-test process.

1 13. (Original) The portable computer system of claim 12, with the key input device being a
2 keyboard of the portable computer system.

1 14. (Original) The portable computer system of claim 13, with said selector being a
2 multiplexer, the output of said multiplexer being controlled by the controller.

1 15. (Previously Amended) The portable computer of claim 14, with the lighting devices being
2 a plurality of light emitting diodes displaying the power-on self-test codes in accordance with an
3 order of the power-on self-test process.

1 16. (Original) A method of displaying power-on self-test codes in a portable computer
2 system, comprising the steps of:
3 starting a power-on self-test process;
4 generating power-on self-test codes;

5 outputting the power-on self-test codes to a microprocessor to display the power-on self-test
6 codes;
7 testing each one of the elements of the portable computer system corresponding to the
8 respective power-on self-test codes;
9 determining whether the test is performed in safety;
10 completing the power-on self-test process if the test is performed in safety in all of the
11 elements; and
12 interrupting the power-on self-test process if the test is not performed in safety in any
13 element.

1 17. (Currently Amended) The method of claim 16, with the outputted power-on self-test
2 codes being displayed through an indicator having a plurality of light emitting diodes (LED), with
3 each power-on self-test code corresponding to a specific light emitting diode.

1 18. (Original) The method of claim 16, with said step of outputting the power-on self-test
2 codes being made to an input-output port within the portable computer.

2 19. (Currently Amended) A method of displaying power-on self-test codes in a portable
3 computer system, comprising the steps of:
4 starting a power-on self-test process;
generating power-on self-test codes;

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6 outputting the power-on self-test codes to a microprocessor to display the power-on self-test
codes;

7 testing each one of the elements of the portable computer system corresponding to the
8 respective power-on self-test codes;

9 determining whether the test is performed in safety;

10 completing the power-on self-test process if the test is performed in safety in all of the
11 elements; and

12 interrupting the power-on self-test process if the test is not performed in safety in any
13 element.

14 ~~The method of claim 16, said step of displaying the power-on self-test codes further~~
15 ~~comprising:~~

16 ~~receiving data through a predetermined input-output port of said microprocessor of the~~
17 ~~portable computer;~~

18 ~~generating an internal interrupt when the data is inputted to said microprocessor;~~

19 ~~checking whether the data inputted through the predetermined input-output port of the~~
20 ~~microprocessor is a power-on self-test code;~~

21 ~~displaying the power-on self-test code through an indicator when data inputted is a power-on~~
22 ~~self-test code; and~~

23 ~~executing other interrupt routines when data is not a power-on self-test code.~~

1 20. (Original) The method of claim 19, with said indicator being a plurality of light emitting

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3 diodes, with each power-on self-test code corresponding to a specific light emitting diode on the portable computer.

1 21. (Original) The method of claim 20, with said light emitting diodes sequentially aligned
2 along a surface of the portable computer according to an order of operating states being tested by the
3 portable computer, the alignment accommodating a rapid view of a progress of the power-on self-
4 test.

1 22. (Original) The method of claim 16, the tested elements comprising a memory, disk drive,
2 and graphics controller.

1 23. (Original) The method of claim 16, with the lighting devices continually displaying the
2 power-on self-test codes during the power-on self-test process.

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2 24. (New) A computer, comprising:
3 an indicating device having a plurality of light emitting devices activated according to a
4 signal from the computer; and
5 a controller managing said indicating device to display power-on self-test codes in response
6 to operating states of the computer, the power-on self-test codes being generated in power-on self-
7 test process by a basic input-output system of the computer system,
with the operating states comprising of a power on or off state, number lock state, a capital

letter state, a scroll lock state, an access state of a disk drive, and a charge state of the battery.

25. (New) A computer, comprising:

an address decoder coupled to an address bus generating a latch control signal by decoding
an address of an output port accommodating power-on self-test codes;

a latch coupled to a data bus of the computer latching the power-on self-test codes from the
data bus in response to the latch control signal;

an indicating device having a plurality of lighting devices indicating operating states of the
computer;

a controller generating an indicating control signal in response to the operating state; and

a selector sending either the indicating control signal or power-on self-test codes of the latch
to said indicating device.